

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/111214 A1

(51) International Patent Classification?:
9/12, 15/54, C12P 7/02, 17/06

C12N 9/02,

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/CH2004/000353

(22) International Filing Date: 10 June 2004 (10.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 03012294.9 12 June 2003 (12.06.2003) EP

(71) Applicant (for all designated States except US): DSM IP ASSETS B.V. [NL/NL]; Het Overloon 1, NL-6411 TE Heerlen (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BAI, Renyunan [CN/CH]; Habsburgerstrasse 2, CH-4310 Rheinfelden (CH). HÜMBELIN, Markus [CH/CH]; Wollbacherstrasse 2, CH-4058 Basel (CH). LEHMANN, Martin [DE/DE]; Talstrasse 21, 79639 Grenzach-Wyhlen (DE). LOPEZ-ULIBARRI, Rual [MX/CH]; Wasserweg 3, CH-4334 Sisseln (CH). WYSS, Markus [CH/CH]; Widmannstrasse 4, CH-4410 Liestal (CH).

(74) Agents: SCHWANDER, Kuno, Josef et al.; Roche Vitamins Ltd., Wurmisweg 576, CH-4303 Kaiseraugst (CH).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FEEDBACK-RESISTANT MEVALONATE KINASES

(57) Abstract: The present invention relates to modified mevalonate kinases that are less sensitive to feedback inhibition, and to polynucleotides encoding them. The invention further pertains to vectors comprising these polynucleotides and host cells containing such vectors. The invention provides a method for producing the modified enzyme and a method for producing isoprenoid compounds.

BEST AVAILABLE COPY